

CLAIMS

1. A new fibrinogen binding protein derived from Staphylococci having a molecular weight of 60 kDa.

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2. Hybrid-DNA-molecule comprising a nucleotide sequence from *S. aureus* coding for a protein or polypeptide having fibrinogen binding activity.

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3. Plasmid or phage comprising a nucleotide sequence from *S. aureus* coding for a protein or polypeptide having fibrinogen binding activity.

4. An *E. coli* strain expressing said fibrinogen binding protein.

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5. A microorganism transformed by recombinant DNA molecule of claim 2.

6. Hybrid-DNA-molecule according to claim 2, comprising the following nucleotide sequence:

GAGCGAAGGA TACGGTCAA GAGAAAAGAA ACCAGTGAGT ATTAATCACA

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ATATCGTAGA GTACAATGAT GGTACTTTA AATATCAATC TAGACCAAAA

TTAACTCAA CACCTAAATA TATTAAATTG AAACATGACT ATAATATTTT

AGAATTAAAC GATGGTACAT TCGAATATGG TGCACGTCCA CAATTTAATA

AACCAGCAGC GAAAAGTGAT GCAACTATTA AAAAAGAACAA AAAATTGATT

CAAGCTAAA ATCTTGAG AGAATTGAA AAAACACATA CTGTCAGTGC

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ACACAGAAAA GCACAAAAGG CAGTCAACTT AGTTTCGTTT GAATACAAAG

TGAACAAAAT GGTCTTACAA GAGCGAATTG ATAATGTATT AAAACAAGGA

TTAGTGAGA

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7. A method for producing a fibrinogen binding protein or polypeptide wherein a) at least one hybrid-DNA molecule according to claim 2, is introduced into a microorganism, b) said microorganism is cultivated in a growth promoting medium, and c) the protein thus formed is isolated.

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8. A fibrinogen binding protein or polypeptide comprising at least one amino acid sequence

SEGYGPREKK PVSINHNIVE YNDGTFKYQS RPKFNSTPKY IKFKHDYNIL

EFNDGTFEYQ ARPQFNKPAA KTDATIKKEQ KLIQAAQNLVR EFEKTHTVSA

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HRKAQKAVNL VSFEYKVKKM VLQERIDNVL KQGLVR

102260-2673650

9. Pharmaceutical composition for the inhibition of Staphylococci binding to fibrinogen comprising a fibrinogen binding protein of claim 1 in combination with a pharmaceutically acceptable carrier.

5 10. Method for inhibition of Staphylococci binding to fibrinogen in mammals including humans, by administering a therapeutically and/or prophylactically effective amount of a fibrinogen binding protein of claim 1 to a mammal in need of such treatment.

10 11. Method for passive immunization against Staphylococcal infection, comprising administering to a mammal antibodies against a fibrinogen binding protein of claim 1 in an amount sufficient to provide passive immunization.

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